

Claims

- [1] 1. A transreflective liquid crystal display device having a liquid crystal panel in which liquid crystal material is sealed between a pair of substrates faced with each other and in which pixels formed on one substrate of said pair of substrates have transmissive regions and reflective regions, comprising:
 - a pair of circularly polarized light members arranged outside said liquid crystal panel; and
 - a backlight arranged outside one circularly polarized light member of said pair of circularly polarized light members,
 - wherein said reflective region has a reflective member for reflecting ambient light from an opposite side of backlight-arranging side in said liquid crystal panel, and said reflective region has phase difference forming means arranged on the backlight-arranging side of said reflective member.
- [2] 2. The device as claimed in claim 1, wherein said phase difference forming means has a function of reversing a direction of circularly polarized light by allowing circularly polarized light to pass therethrough twice.
- [3] 3. The device as claimed in claim 1 or 2, wherein said phase difference forming means is formed on said reflective regions in a main surface inside said liquid crystal panel on one substrate on the backlight-arranging side of the pair of substrates and said reflective member is formed on said phase difference forming means.
- [4] 4. The device as claimed in claim 3, wherein said phase difference forming means is a retardation film for delaying phase with $\lambda/4$.
- [5] 5. The device as claimed in any one of claims 1 to 4, wherein said phase difference forming means also serves as a stepwise member for adjusting a balance between transmittance in said transmissive region and reflectance in said reflective region.
- [6] 6. The device as claimed in any one of claims 1 to 3, wherein said phase difference forming means is orientation-processed polymer liquid crystal layer.
- [7] 7. The device as claimed in claim 6, wherein said polymer liquid crystal layer delays phase with $\lambda/4$.
- [8] 8. The device as claimed in any one of claims 1 to 3, wherein said phase difference forming means is formed on said reflective regions in a main surface outside said liquid crystal panel on one substrate on the backlight-arranging side of said pair of substrates.
- [9] 9. The device as claimed in claim 8, wherein said phase difference forming means is a retardation film or a phase difference film for delaying phase with $\lambda/4$.